

# How Models Work



On the benefits and limitations of organizing, engagement, and equity models

## Models Introduction

For more than half a century, researchers and practitioners have been developing a wide variety of models and frameworks to organize, systemize, and simplify important theories, findings, and practices in fields such as youth development, family-school engagement, participatory democracy, deliberative dialogue, or community organizing.

In our [Models section](#), we collect and introduce several influential and widely used models created over the past several decades that can be applied in education organizing, engagement, and equity work. We intentionally selected cross-disciplinary models, given that models of civic participation, for example, often have practical application in the more narrow compass of educational engagement.

Our goal in assembling these introductions is to provide local leaders, organizers, advocates, and practitioners with an accessible survey of the foundational work that has shaped research and practice in relevant fields. When local practitioners go beyond simply executing recommended strategies, and take the time to understand where those strategies came from or how they evolved, they are often able to develop more informed strategies that increase their chances of success.

Our introductions, while relatively succinct, are intended to help readers understand how the models work and how they might be used in schools or communities. To that end, we provide relevant examples that will help local leaders envision how the models might be applied in real-world contexts.

Finally, the models introduced on this website have been carefully selected, and we hope to expand the models section in the future. **If you want to recommend a particularly relevant, useful, or instructive model for consideration, [let us know](#) →**

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## The Benefits of Models

Models can provide a variety of benefits:

- **Models simplify complexity.** In general, models of organizing, engagement, or equity—whether they take the form of diagrams, tables, charts, metaphors, or some other presentation—are useful precisely because they avoid the often confusing complexity of real-world situations that can obscure underlying motivations or dynamics. When practitioners are attempting to make sense of muddled or seemingly contradictory social interactions, simplifying models can facilitate understanding of fundamental features that would otherwise be difficult to isolate or interpret in their natural setting.
- **Models facilitate pattern recognition.** The most useful and accurate models are based on well-documented patterns of interpersonal and social behavior that tend to repeat themselves within or across contexts. And this is what makes the best models so valuable. For example, local practitioners typically understand their schools or communities quite well, but they may not have as much exposure to other schools or communities. Models are most valuable when they compress years or decades of hard-earned observation, experience, and research into a diagram or description that can be understood in a few minutes or hours, and that can be productively utilized by those who are unable to dedicate many months or years to studying a problem they have been tasked with solving.
- **Models can be useful problem-solving tools.** Because models simplify complexity and facilitate pattern recognition, they are often useful as analytical, diagnostic, or evaluative instruments. For example, models can help local leaders better understand a complex equity situation, diagnose why a particular approach may not have been working, generate new strategies based on processes that have worked in other communities, and then evaluate whether the new approaches are producing better results.
- **Models can help organize or systematize action.** In many schools and communities, local practitioners may be operating without the funding, staffing, or training they need to adequately address the complexity or scale of the problems they're trying to solve. In these cases, they not only need to work as efficiently as possible, but they also need to know what to prioritize and what's worked—or not—in similar schools and communities. By using models as a starting point, local practitioners may, for example, be able to save several months of frustrating trial-and-error by avoiding strategies that are more likely to fail. In addition, models can help organizations and teams develop coherent plans built on evidence-based strategies or create an evaluation protocol that can be reliably used by different groups in diverse contexts.
- **Models can be revised when new information emerges.** Many of the most useful and widely used models typically undergo an iterative process of revision and improvement, whether it's before or after they are formally published or shared. Because many models can be piloted, tested, and reworked, and then piloted, tested, and reworked again, some models develop into a series of increasingly useful frameworks over time, some of which get adapted for more specialized applications (e.g., a model of adult civic engagement being modified for application with children or adolescents in educational settings).

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# The Limitations of Models

Models also present a variety of limitations:

- **Simplifications can be misrepresentative.** Models are, unavoidably, simplifications, and as such they can misrepresent real-world complexities and human social behaviors in any number of ways. For example, many models are presented as either vertical or horizontal progressions that imply step-by-step developmental, sequential, or hierarchical progressions. Yet social, cultural, and political dynamics rarely (if ever) follow clear, stepwise progressions; in real-life situations, progress is typically a messy, convoluted process prone to unexpected reversals or unlikely outcomes. When using and applying models, practitioners should remain mindful that simplifying models will never fully capture the intricate, nuanced texture of human social dynamics.
- **Models can be misinterpreted and misapplied.** It could almost be considered a universal truism that every model, at some point, will be misinterpreted and misapplied. Even when model developers take pains to explain the purpose, limitations, and correct applications of their frameworks, it's inevitable that someone, somewhere, will neglect the guidance. In many cases, however, misinterpretations result from models becoming disconnected from their original presentation—a phenomenon that has only become more pronounced in the age of Google and social media. For example, Sherry Arnstein's [\*\*Ladder of Citizen Participation\*\*](#) was proposed in the *Journal of the American Planning Association* in 1969. In the five decades since, this extremely influential model has been shared, discussed, and republished countless times, but it is likely that only a very small percentage of the people who have encountered or used Arnstein's Ladder have actually read her [\*\*original article\*\*](#)—or the caveats and cautions she discusses therein.
- **Models are culturally biased.** Every simplifying model reflects some degree of cultural bias, which means it may be less accurate or useful when applied in certain contexts or cultures. For example, most of the models collected on this website were developed by American or European academics, researchers, and practitioners who either primarily or exclusively study American or European populations, or who apply potentially biased American or European perspectives to solving problems in other parts of the globe. While not intrinsically problematic, the framing and orientation of any model may reflect hidden biases that, when applied in racially or culturally diverse settings, can result in misinterpretations or misapplications. For example, American culture tends to emphasize individualism and the value of progressive independence and autonomy in child development, and therefore models that reflect this orientation may be less useful—or even potentially harmful—when generically applied to cultures that emphasize the value and centrality of familial or communal interdependence in child development. In addition, an individualism-oriented model may lead researchers or practitioners to undervalue the

features of communalism-oriented cultures, and therefore become blind to their benefits. Even more problematically, cultural biases—when embedded in theory, modeling, policy, institutional practice, and other areas—can re-categorize benefits as problems, leading to harmful effects such as stigmatization or discrimination.

- **Models can promote conformist thinking and stifle creativity.** When models become resistant to modification, or when people stop questioning or testing their validity, they can sometimes promote conformism, doctrinaire thinking, technocratic elitism, and other potentially problematic beliefs and behaviors. In these cases, models cease to be *useful tools* that are adapted for specific contexts and instead become *rigidified orthodoxies* that can masquerade as truth or mask flawed assumptions. For example, the supposition that **humans were largely rationale when making financial and commercial choices** dominated modeling in behavioral economics and economic policy-making for decades until a new generation of economists suggested that humans may actually be *irrational* in many areas of the economy. One of the primary hazards of modeling, generally speaking, is that models can be based on flawed assumptions, biases, or incomplete data that are eventually proven to be wrong or misleading. And yet some flawed models, before their inaccuracy is demonstrated, are nevertheless extraordinarily influential, including in ways that encourage or justify prejudiced, discriminatory, or oppressive behaviors.
- **Some models are supported by stronger evidence than others.** It almost goes without saying that some models are better supported than others, and that some may be based on strong evidence in one area (e.g., in Western, white, suburban, or middle-class contexts) but fail to have strong evidence supporting their application or efficacy in other areas (e.g., in non-Western, non-white, urban, or working-class contexts). While many models published in peer-reviewed academic journals have been subject greater scrutiny and higher standards of evaluation, peer-reviewed academic models can still be deeply flawed or problematic, often because of factors such as hidden cultural bias, misleadingly small data sets, or their tendency to propagate establishment thinking (because establishment conformity is what earns funding, promotions, and professional prestige in many academic fields). For example, esteemed academic journals, throughout most of American history, routinely published pseudo-scientific articles, theories, and models intended to manufacture “scientific” justification for slavery or racist social policy. In addition, the social sciences have been struggling through a so-called “**replication crisis**” in recent years that has called into question many of the most celebrated and cited research in the field. When evaluating a model for a specific application or context, it’s wise to research the evidence supporting it.
- **Some models are meant to be descriptive, not evaluative.** A fairly common misapplication of a descriptive framework (i.e., one that is only intended to describe a phenomenon or illustrate a process) is when it’s used as an evaluative instrument (i.e., as a tool for assessing efficacy or impact). For example, “ladders” of public engagement typically illustrate different degrees of participant agency, control, or power in a process, with lower “rungs” describing less power, and the higher rungs describing greater power. In this case, it’s tempting to view the higher rungs as “better” and the lower rungs as “worse,” and to develop corresponding evaluative processes that measure and rate different forms of public participation accordingly. Where a misapplication of this kind can go wrong, for example, is

when all forms of “lower-rung” participation are negatively evaluated, even when they may be helpful or appropriate in some contexts (thereby causing local leaders to disregard valuable strategies), or when practitioners avoid certain forms of lower- or middle-rung engagement (that may be useful or appropriate) because they fear a negative evaluation. For a more detailed discussion of this specific problem, see our introduction to Roger Hart’s **Ladder of Children’s Participation**.

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